



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,183	03/31/2004	Raymond P. Feith	74688/P004CP1D1/10804933	7854
29053 7590 03/30/2010 FULBRIGHT & JAWORSKI L.L.P. 2200 ROSS AVENUE SUITE 2800 DALLAS, TX 75201-2784				
EXAMINER VU, QUYNH-NHU HOANG				
ART UNIT		PAPER NUMBER		
3763				
MAIL DATE		DELIVERY MODE		
03/30/2010		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/816,183  
Filing Date: March 31, 2004  
Appellant(s): FEITH ET AL.

---

Raymond Feith  
Tim Truitt  
Gary Weschmidt  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 02/22/10 appealing from the Office action mailed 04/30/09.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

3,889,710	Brost	6-1975
4,922,954	Blomquist et al.	5-1990
4,946,448	Richmond	8-1990
6364861	Feith et al.	4-2002

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. No where in the Specification discloses that: the first pressure resulting from fluid in the flow channel; the third pressure resulting from fluid in the injection lumen greater than one of said first pressure and said second pressure.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by Richmond (US 4,946,448).**

Richmond discloses an injection port comprising: a housing defining a flow channel 80 and having an injection lumen 66 extending in fluid communication with the flow channel;

first portion of the housing defining a first valve seat 78 (Fig. 2 with the solid line);

second portion of the housing defining a second valve seat 82, 83 around the injection lumen (Fig. 2 with the dash line); a valve element 84 disposed to extend transverse to the injection lumen;

the valve element forming a first seal with the first valve in response to a first pressure (at rest or original state, Fig. 2 with the valve 84 in solid line), the first pressure resulting from fluid in the flow channel (at this point the slit 86 closed condition and the valve 84 has curve-shaped rested on valve seat 78);

the valve element forming a second seal (the valve 84 deformed in different shaped at dash line in Fig. 2 and rest on second valve seat 82, 83). It is inherently that a second pressure resulting from fluid in the flow channel (a force to press down) is greater than the first pressure at original state, therefore, the valve disc 84 is deformed in different shape (dash line), and liquid flows downwardly through the line 34 (Fig. 2 with the dash line, col. 4, lines 37+);

and the valve element 84 forming an open configuration between the lumen and the flow channel in response to third pressure resulting from fluid in the flow channel (Fig. 3). At this point, the pressure at upstream (a third pressure) is largest pressure, therefore, this allow liquid to flow in an upstream direction through the check valve (col. 6, lines 37+).

As noted that, if the third pressure is smaller than the first pressure, the slit 86 will not be opened and the valve 84a stills rest on element 82, 83, and the valve disc 78 still in the shape shown in dash line of Fig. 2 but not sit on valve seat 78 as shown in Fig. 3.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-3 are rejected under 35 U.S.C. 103(a) as unpatentable over Blomquist et al. (US 4,922,954) in view of Brost (US 3,889,710).**

Blomquist discloses, Figs. 6-9, a bi-directional vent/air/valve with a resilient sealing member 38. However, the device of Blomquist is similar to the structure of claimed invention, (as described below for details), therefore, the device of Blomquist is capable of using or applying in fluid stream line. For example, the fluid stream lines can flow in the same direction of the arrows (direction of air flow) showed in Figs. 8-9 under some type of pressures applied.

The device comprising: a housing defining a flow channel 32; and a lumen 31;  
a first portion of the housing defining a first valve seat 39;  
a second portion of the housing defining a second valve seat 38;  
a valve element 37 disposed to extend transverse to the lumen 31;  
the valve element 37 forming a first seal with the first valve seat at 39 in response to a first pressure (Fig. 7), the first pressure resulting from air/fluid in the flow channel at equilibrium condition.

a valve element 37 forming a second seal (the valve element 37 in Fig. 8 deformed in different shape with the valve element 37 in Fig. 7) with the second valve seat at seating surface of element 38 in response to a second pressure. At this point, the air/fluid pressures in Fig. 8 called second pressure must be larger than the first pressure and causes the valve element 37 deformed and located in different location compares

with location of valve element 37 seat in Fig. 7. Since then, the air/fluid can flow into the chamber 32 (see arrow direction in Fig. 8).

and valve element 37 forming an open configuration between the lumen and the flow channel in response to a third pressure (Fig. 9). At this point, it is inherently that the third pressure/negative pressure must be greater than one of the first pressure and the second pressure, therefore, the vent/fluid flow out in Fig. 9 and opposites direction with vent air/fluid flow in Fig. 8.

Blomquist disclose the flow lumen but does not show the flow lumen extending as claimed invention.

Brost discloses an injection port comprising a housing defining a flow channel 26 and an injection lumen 22 extending in fluid communication with the flow channel.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Blomquist with a flow lumen or injection lumen extending, as taught by Brost, in order to provide the fluid communication with other device.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5-7 of U.S. Patent Nos. 6,364,861. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are not structurally distinguishable from the claims in the patents.

For example: the limitation "the valve element forming an opening configuration between said lumen and said flow channel in response to a third pressure in said lumen greater than one of said first pressure and said second pressure" of claimed invention is equivalent of the limitations of claims 5-6 and 7 of US 6,364,861.

**(10) Response to Argument**

**A. 35 U.S.C § 112 Rejection**

*Applicant argues that the rejection under 35 U.S.C 112, first paragraph is improper and clearly supported by the written description for the reasons on pages 4-5 of Appeal Brief.*

In response, Applicant originally selected Species of Figs. 14-16 by the Restriction/Election mailed out 01/24/08 and Response to Election/Restriction filed 04/24/08). Meanwhile, Applicant gives the evidences to support his argument in Non-Elected Species of Figs. 10-13. Examiner agrees that the Specification on page 13, lines 11-31 and Elected Species of Figs. 14-16 are covering the valve element forming a first seal; a second seal and a third seal. However, nowhere in the Specification support the limitation such as: the first pressure resulting from fluid in the flow channel; a third pressure resulting from fluid in the injection lumen greater than one of said first pressure and said second pressure.

As Applicant is aware, the Specification states on page 13, lines 19-21 that: in its normal state, the valve element 74 biased to form a first seal with the first valve seat 110 and a second seal with a third valve seat 103 as illustrated in Fig. 14. Nowhere in the Specification mentions the pressure resulting from fluid in the flow channel. In other words, at normal state, the pressure at equilibrium state, or zero pressure and there is no fluid flowing because the valve element 74 is in rest state until the fluid pressure flowing in the channel defines as a second pressure. At this point, the valve element 74 is bent downwardly as shown in Fig. 15. And under a third pressure at suction state, the valve element 74 forming a third valve seal shown in Fig. 16. However, the Specification does not mention that the third pressure greater than one of said first pressure and said second pressure.

B. 35 U.S.C § 102(b) Rejection (Richmond)

*1) Applicant argues that Richmond does not disclose that both of the second pressure and the first pressure both result from fluid in the flow channel, as required in claim 1.*

In response, Richmond clearly includes first and second pressures both result from fluid in the flow channel. For example, when fluid gets into the conduit 34 and upper housing 66 and called as a first pressure. At this point, the valve disc 84 forms a first seal and still in closed state and against the valve seat 78. Applicant is aware that at this time, the fluid is in passage of the upper housing 66 but no fluid flowing through the check valve because the blocking of valve disc 84 (Fig. 2 in solid line) with the slit 86 closed.

Then, a second pressure of fluid flowing applied; wherein the second pressure is greater than the first pressure. At this point, the projections 82 (called as a second valve seat) support the valve disc 84 in dash line of Fig. 2, liquid flows downwardly through the line 34, col. 4, lines 49-57. The valve disc 84 in dash line of Fig. 2 forming a second seal.

*2. Applicant argues that: the prongs in Richmond are not a valve seat upon which the valve element can form a second seal in response to the second pressure as required in claim 1.*

In response, although Richmond does not explicitly state that elements 82 and 83 are as valve seat, However, labels, statements of intended use, or functional language do not structurally distinguish claims over prior art, which can function in the same manner, be labeled in the same manner or be used in the same manner. See In re Pearson, Ex parte Minks, and In re Swinehart.

In this case, the projections or prongs 82, 83 are the place for the valve disc 84 in dash line of Fig. 2 resting/seating at a second pressure. Therefore, the projection or prong 82, 83 is considered as a second valve seat.

C. 35 U.S.C 103 rejection over Blomquist in view of Brost:

*1. Applicant argues that Blomquist never responds to a first pressure by forming a first seal with the valve element disposed against a first valve seat. Blomquist never describes a first and second pressure both resulting from fluid a flow channel.*



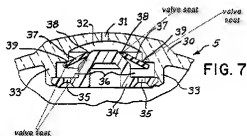
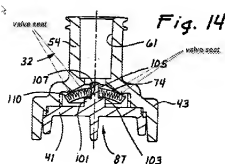
Examiner respectfully disagrees with Applicant. It is noted that, according to Specification of Applicant on pg 13, lines 11- pg 14, line 2 (Figs. 14-16, Elected Species), nowhere clearly discloses on pages 13-14 that a first pressure by forming a first seal with a valve element disposed against a first valve seat. Application only states that : "in its normal state, the port 32 is positioned with the valve element 74 biased to form a first seal with the first valve seat 110 and a second seal with a third valve seat 103 as illustrated in Figure 14" (page 13, lines 18-20). Applicant does not mention any pressure applied in Fig. 14 whatsoever. Applicant only mentioned applying some fluid pressures in Figs. 15-16 but not in Fig. 14 at all.

Meanwhile, Blomquist states that: assuming that there is no pressure differential across the vent, e.g. equilibrium, col. 5, lines 22-24. In other words, at equilibrium state, the pressure inside of the tank = the pressure outside of the tank, therefore, the air/liquid flowing at this point. With the broadest interpretation, Examiner interprets that the pressure under equilibrium at normal state in Fig. 14 and can be called first pressure.

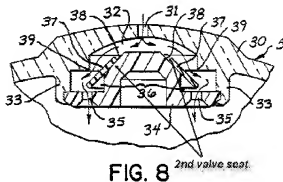
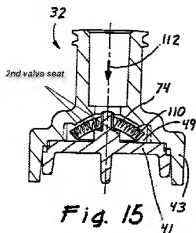
Similarly, Blomquist discloses that the vent air/fluid flow in the equilibrium state or normal state, there is no air/fluid flowing at equilibrium/normal state. At this state, the valve element 37 rested on edge 39 and seating surface 38.

The valve seat locations of Application in Figs. 14 are similarly to the reference of Blomquist.

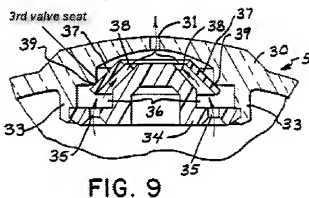
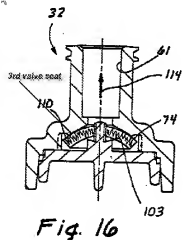
At normal state:



Under the second pressure (fluid pressure) resulting from fluid in the flow channel:



Under the third pressure by applying a suction and forming a third valve seal with a third valve seat:



2. Applicant argues that Blomquist does not describe, and Brost is not relied upon as describing, a first pressure and a second pressure both resulting from fluid in a fluid channel where the second pressure is greater than first pressure.

In response, Blomquist clearly shows that: under some pressure, the valve element 37 in Fig. 8 deformed in different shape with the valve element 37 (first seal) in Fig. 7. In response to a second pressure, the valve element 37 in Fig. 8 moved and located on the sealing surface 38 with new location compares with location in Fig. 7. At this point, the air/fluid flow into the chamber 32 by arrow direction showed in Fig. 8. It is

Art Unit: 3763

inherently that the second pressure must be greater than the first pressure, therefore, the air/fluid can be flowed into the chamber. Also see the comparing between the claimed invention in Figs. 14-16 and Blomquist reference in Figs. 7-9 above.

*3. Applicant states that the lacking of motivation to combine Blomquist in view of Brost. Brost is a check valve assembly whose operation is to allow fluid flow in one direction, but prevent fluid flow in the opposite direction. Blomquist, conversely, freely permits the flow of gasses in either direction to equalize pressure on both sides of the vent.*

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Blomquist discloses a bi-directional vent, however, the vent is in formed as a valve (i.e. check valve or duck bill, etc...), see col. 1, lines 18-58. The vent/valve device is working similar as the valve system of the claimed invention, as discussed above. Blomquist shows the vent/valve system includes a hole/aperture 31 but not the injection lumen or injection port as required in claim invention. Meanwhile, Brost discloses an injection port comprising a housing defining a flow channel 26 and an injection lumen 22 extending in fluid communication with the flow channel; a valve element 13.

Therefore, one skill in the art would recognize that the combination of Blomquist device with a injection lumen 22, as taught by Brost, in order to providing the fluid communication with other device.

Alternatively, the combination of Brost and Blomquist device such as replacing the vent/valve system of Blomquist into the check valve 13 of Brost will bring the valve system similar as the valve of claimed invention.

#### D. Rejection of Double Patenting:

*Applicant argues that claims 1-3 require the valve element forming an open configuration between said lumen and said flow channel in response to a third pressure resulting from fluid in the injection lumen, the third pressure greater than one of said first pressure and said second pressure. As this limitation is not found in claim 1-25 of the '861 patent.*

In response, although the conflicting claims are not identical, they are not patentably distinct from each other because they are not structurally distinguishable from the claims in the patents.

In claims 5-6 of '861 patent discloses a third portion of the housing defining a third valve seat on the side of the valve element opposite the first and second valve seat; and the valve element having properties for forming a third seal with the third valve seat (claim 5); the valve element has properties for opening at least the first seal under the pressure of an injectate in the injection lumen to create a flow path around the valve element between the injection lumen and the flow channel; the valve element has properties for opening the third seal in response a partial vacuum in the injection lumen to aspirate a portion of the fluid in the flow channel around the valve element and into the injection lumen (claim 6).

In other words, the third pressure must greater than first pressure to aspirate or vacuum the fluid in the flow channel.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Quynh-Nhu H. Vu

/Quynh-Nhu H. Vu/

Examiner, Art Unit 3763

Conferees:

Nick Lucchesi

/Nicholas D Lucchesi/

Supervisory Patent Examiner, Art Unit 3763

Tatyana Zalukaeva

/Tatyana Zalukaeva/

Application/Control Number: 10/816,183

Page 12

Art Unit: 3763

Supervisory Patent Examiner, Art Unit 3761